



RECEIVED

SEP 14 2001

TECH CENTER 1600/2900

1 GAATTCCCAA AGACAAa~~atg~~ gattttcaag tgcagatttt ~~cagcttcctg~~
51 ~~ctaatacagtg~~ ~~cctcagtc~~at aatatccaga ggacaaattg ttctcacc~~ca~~
101 gtctccagca atcatgtctg catctccagg ggagaagg~~tc~~ accatgac~~ct~~
151 gcagtgccag ctcaagtgt~~a~~ agttacatga actgg~~tacca~~ gcagaagt~~ca~~
201 ggcacctccc ccaaaagatg gatttatgac acatccaa~~ac~~ tggcttct~~gg~~
251 agtccctgct cacttcagg~~g~~ gcagtggg~~tc~~ tgggac~~ctct~~ tactctct~~ca~~
301 caatcagcgg catggagg~~ct~~ gaagatgctg ccacttatta ctgccagc~~ag~~
351 tggagtagta accattcac gttcgggctcg gggacaaag~~t~~ tggaaa~~taaa~~
401 ccgggctgat actgcacca~~a~~ ctgtatccat ctccccac~~ca~~ tccagtga~~gc~~
451 agttaacatc tggagg~~tgcc~~ tcagtcgtgt gcttcttg~~aa~~ caacttct~~tac~~
501 cccaaagaca tcaatgtcaa gtggaagatt gatggcag~~tg~~ aacgacaa~~aa~~
551 tggcgctcctg aacagttgga ctgatcagga cagcaaag~~ac~~ agcaccta~~ca~~
601 gcatgagcag caccctcacg ttgaccaagg acgag~~tatga~~ acgacata~~ac~~
651 agctataacct gtgaggccac tcacaagaca tcaacttc~~ac~~ ccattgtc~~aa~~
701 gagcttcaac aggaatgag~~t~~ gtTAGAGACA AAGGTCCTGA GACGCCACCA
751 CCAGCTCCCA GCTCCATCCT ATCTTCCCTT CTAAGGTCTT GGAGGCTTCC
801 CCACAAGCGC tTACCACTGT TCGGGTGCTC TAAACCTCCT CCCACCTCCT
851 TCTCCTCCTC CTCCCTTTCC TTGGCTTTTA TCATGCTAAT ATTTGCAGAA
901 AATATTCAAT AAAGTGAGTC TTTGCCTTGA AAAAAAAAAA AAA
(SEQ ID NO: 4)

FIG. 1a

1 MDFQVQIFSF LLISASVIIS RGDQIVLTQSP AIMSASPGEK VTMTCSASSS
51 VSYMNWYQQK SGTSPKRWIY DTSKLASGVP AHFRGSGSGT SYSLTISGME
101 AEDAATYYCQ QWSSNPFTFG SGTKLEINRA DTAPT~~VSIFP~~ PSSEQLTSGG
151 ASVVCFLNNF YPKDINVKWK IDGSERQNGV LNSWTDQDSK DSTYSMSSTL
201 TLT~~KDEYERH~~ NSYTCEATHK TSTSPIVKSF NRNEC* (SEQ ID NO: 5)

FIG. 1b

Application No.: 08/846,658

Title: Humanised Antibodies

Inventors: John R. Adair, Diljeet S. Athwal and John S. Emtage

Docket No. CARP-0057

Atty: Doreen Yatko Trujillo

Date of Filing: May 1, 1997

Telephone No. (215) 568-3100

```

1  GAATTCCCCT CTCCACAGAC ACTGAAAAC CTGACTCAAC ATGGAAAGGC
51  ACTGGATCTT TCTACTCCTG TTGTCAGTAA CTGCAGGTGT CCACTCCCAG
101 GTCCAGCTGC AGCAGTCTGG GGCTGAACTG GCAAGACCTG GGGCCTCAGT
151 GAAGATGTCC TGCAAGGCTT CTGGCTACAC CTTTACTAGG TACACGATGC
201 ACTGGGTAAA ACAGAGGCCT GGACAGGGTC TGGAAATGGAT TGGATACATT
251 ATTCCTAGCC GTGGTTATAC TAATTACAAT CAGAAGTTCA AGGACAAGGC
301 CACATTGACT ACAGACAAAT CCTCCAGCAC AGCCTACATG CAACTGAGCA
351 GCCTGACATC TGAGGACTCT GCAGTCTATT ACTGTGCAAG ATATTATGAT
401 GATCATTACT GCCTTGACTA CTGGGGCCAA GGCACCACTC TCACAGTCTC
451 CTCAGCCAAA ACAACAGCCC CATCGGTCTA TCCACTGGCC CCTGTGTGTG
501 GAGATACAAC TGGCTCCTCG GTGACTCTAG GATGCCTGGT CAAGGGTTAT
551 TTCCCTGAGC CAGTGACCTT GACCTGGAAC TCTGGATCCC TGTCCAGTGG
601 TGTGCACACC TTCCCAGCTG TCCTGCAGTC TGACCTCTAC ACCCTCAGCA
651 GCTCAGTGAC TGTAACCTCG AGCACCTGGC CCAGCCAGTC CATCACCTGC
701 AATGTGGCCC ACCCGGCAAG CAGCACCAAG GTGGACAAGA AAATTGAGCC
801 ACCTCTTGGG TGGACCATCC GTCTTCATCT TCCCTCCAAA GATCAAGGAT
851 GTA CT CATGA TCTCCCTGAG CCCCATAGTC ACATGTGTGG TGGTGGATGT
901 GAGCGAGGAT GACCCAGATG TCCAGATCAG CTGGTTTGTG AACACGTGG
951 AAGTACACAC AGCTCAGACA CAAACCCATA GAGAGGATTA CAACAGTACT
1001 CTCCGGGTGG TCAGTGCCCT CCCCATCCAG CACCAGGACT GGATGAGTGG
1051 CAAGGAGTTC AAATGCAAGG TCAACAACAA AGACCTCCCA GCGCCCATCG
1101 AGAGAACCAT CTCAAAACCC AAAGGGTCAG TAAGAGCTCC ACAGGTATAT
1151 GTCTTGCCCTC CACCAGAAGA AGAGATGACT AAGAAACAGG TCACTCTGAC
1201 CTGCATGGTC ACAGACTTCA TGCCTGAAGA CATT.TACGTG GAGTGGACCA
1251 ACAACGGGAA AACAGAGCTA AACTACAAGA ACACTGAACC AGTCCTGGAC
1301 TCTGATGGTT CTTACTTCAT GTACAGCAAG CTGAGAGTGG AAAAGAAGAA
1351 CTGGGTGGAA AGAAATAGCT ACTCCTGTTC AGTGGTCCAC GAGGGTCTGC
1401 ACAATCACCA CACGACTAAG AGCTTCTCCC GGACTCCGGG TAAATGAGCT
1451 CAGCACCCAC AAAACTCTCA GGTCCAAAGA GAGACCCACA CTCATCTCCA
1501 TGCTTCCCTT GTATAAATAA AGCACCCAGC AATGCCTGGG ACCATGTAAA
1551 AAAAAAAAAA AAAGGAATTC (SEQ ID NO:6)

```

FIG. 2a

OKT 3 HEAVY CHAIN PROTEIN SEQUENCE DEDUCED FROM DNA SEQUENCE

1 MERHWIFLLL LSVTAGVHSQ VQLQQSGAEL ARPGASVKMS CKASGYTFTR
51 YTMHWVKQRP GQGLEWIGYI NPSRGYTNYN QKFKDKATLT TDKSSSTAYM
101 QLSSLTSEDS AVYYCARYYD DHYCLDYWGQ GTTLTVSSAK TTAPSVYPLA
151 PVCGDTTGSS VTLGCLVKGY FPEPVTLTWN SGSLSSGVHT FPAVLQSDLY
201 TLSSSVTVTS STWPSQSITC NVAHPASSTK VDKKIEPRGP TIKPCPPCKC
251 PAPNLLGGPS VFIFPPKIKD VLMISLSPIV TCVVVDVSED DPDVQISWFV
301 NNVEVHTAQT QTHREDYNST LRVVSALPIQ HQDWMSGKEF KCKVNNKDLP
351 APIERTISKP KGSVRAPQVY VLPPPEEEMT KKQVTLTCMV TDFMPEDIYV
401 EWTNNGKTEL NYKNTEPVLD SDGSYFMYSK LRVEKKNWVE RNSYSCSVVH
451 EGLHNHHTTK SFSRTPGK* (SEQ ID NO: 7)

FIG. 2b

Application No.: 08/846,658

Title: Humanised Antibodies

Inventors: John R. Adair, Diljeet S. Athwal and John S. Emtage

Docket No. CARP-0057

Date of Filing: May 1, 1997

Atty: Doreen Yatko Trujillo

Telephone No. (215) 568-3100

```

1                23                42
NN              N                N    N    N
RES TYPE      SBSpSPESssBSbSsSssPSPSPsPSsse*s*p*Pi^ISsSe
Dkt3vl       QIVLTQSPA1MSASPGEKVTMTCSASS.SVSYMNWYQQKSGT
REI          DIQMTQSPSSLSASVGDRVTITCQASQDI23IKYLNWYQQI42PGK
? ?
      CDR1    (LOOP)          *****
      CDR1    (KABAT)        *****

                    56                85
N  NN
RES TYPE      *IsiPpIeesesssSBEsePsPSBSSEsPspSPsseesSPePb
Dkt3vl       SPKRWIYDTSKLASGVPAHF56RGSGSGTSYSLTISGMEAE85DAAT
REI          APKLLIYEASN56LQAGVPSRFSGSGSGTDYTET85ISSLQPED85IAT (SEQ
ID NO:8)     ? ??                ? ?
              ***** CDR2 (LOOP/KABAT)

                    102   108
RES TYPE      PiPIPIes***iPIIsPPSPSPSS
Dkt3vl       YYCQQWSSNPFTFGSGTKLEINR (SEQ ID NO:29)
REIvl        YYCQQYQSLPYTFGQGT102KLQ108IR (SEQ ID NO:9)
              ?      ?
              ***** CDR3 (LOOP)
              ***** CRD3(KABAT)

```

FIG. 3

Application No.: 08/846,658

Title: Humanised Antibodies

Inventors: John R. Adair, Diljeet S. Athwal and John S. Emtage

Docket No. CARP-0057

Atty: Doreen Yanko Trujillo

Date of Filing: May 1, 1997

Telephone No. (215) 568-3100

```

NN N                23 26    32 35  N39  43
RES TYPE  SESPs^SBssSsSSssSpSpSPsPSEbSBssBePi^Pipiesss
Dkt3h     QVQLQQSGAELARPGASVKMSCKASGYTFTRYTMNHWVKQRPGQ
KOL       QVQLVESGGGVVQPGRSLRLSCSSSGFIFSSYAMYWVRQAPGK
              ?                ??

                                ***** CDR1 (LOOP)
                                ***** CDR1 (KABAT)

                    52a    60        65    N N N    82abc    89
RES TYPE  ILeIppp^ssssssss^ps^pSSsbSpseSsSseSp^pSpsSBssS^ePb
Dkt3vh    GLEWIGYINPSRGYTNTNQKFKRKATLTTDKSSSTAYMQLSSLTSEDSAV
KOL       GLEWVAIIWDDGSDQHYADSVKGRFTISRDNSKNTLELQMDSLPPEDTGV
              ??                ? ? ? ? ?

                                ***** CDR2 (LOOP)
                                ***** CDR2 (KABAT)

                    92 N                107    113
RES TYPE  PiPIEissssiisssbibi*EIPIP*spSBSS
Dkt3vh    YYCARYYDDHY.....CLDYWGQGTTLTVSS (SEQ ID NO:30)
KOL       YFCARDGGHGFCSSASCFGPDYWGQGTPTVTVSS (SEQ ID NO:10)
              ***** CRD4 (KABAT/LOOP)

```

FIG. 4

Application No.: 08/846,658

Title: Humanised Antibodies

Inventors: John R. Adair, Diljeet S. Athwal and John S. Emtage

Docket No. CARP-0057

Date of Filing: May 1, 1997

Atty: Doreen Yanko Trujillo

Telephone No. (215) 568-3100

DKT 3 HEAVY CHAIN CDR GRAFTS

1. gh341 and derivatives

	1	26	35	39	43	
Dkt3vh	QVQLQQSGAELARPGASVKMSCKASGYTFTRYTMHWVKQRPQG					
gh341	QVQLVESGGGVVQDGRSLRLSCSSSGYTFTRYTMHWVRQAPGK					JA178
gh341A	QVQLVQSGGGVVQPGRSLRLSCKASGYTFTRYTMHWVRQAPGK					JA185
gh341E	QVQLVQSGGGVVQPGRSLRLSCKASGYTFTRYTMHWVRQAPGK					JA198
gh341*	QVQLVQSGGGVVQPGRSLRLSCKASGYTFTRYTMHWVRQAPGK					JA207
gh341*	QVQLVQSGGGVVQPGRSLRLSCKASGYTFTRYTMHWVRQAPGK					JA209
gh341D	QVQLVQSGGGVVQPGRSLRLSCKASGYTFTRYTMHWVRQAPGK					JA197
gh341*	QVQLVQSGGGVVQPGRSLRLSCKASGYTFTRYTMHWVRQAPGK					JA199
gh341C	QVQLVQSGGGVVQPGRSLRLSCKASGYTFTRYTMHWVRQAPGK					JA184
gh341*	QVQLVQSGGGVVQPGRSLRLSCSASGYTFTRYTMHWVRQAPGK					JA203
gh341*	QVQLVESGGGVVQPGRSLRLSCSASGYTFTRYTMHWVRQAPGK					JA205
gh341B	QVQLVESGGGVVQPGRSLRLSCSSSGYTFTRYTMHWVRQAPGK					JA183
gh341*	QVQLVQSGGGVVQPGRSLRLSCSASGYTFTRYTMHWVRQAPGK					JA204
gh341*	QVQLVESGGGVVQPGRSLRLSCSASGYTFTRYTMHWVRQAPGK					JA206
gh341*	QVQLVQSGGGVVQPGRSLRLSCSASGYTFTRYTMHWVRQAPGK					JA208
KDL	QVQLVESGGGVVQPGRSLRLSCSSSGFIFSSYAMYWVRQAPGK					

FIG. 5a

Application No.: 08/846,658

Title: Humanised Antibodies

Inventors: John R. Adair, Diljeet S. Athwal and John S. Emtage

Docket No. CARP-0057

Atty: Doreen Yatko Trujillo

Date of Filing: May 1, 1997

Telephone No. (215) 568-3100

	44	50	65	83	
Dkt3vh	GLEWIGYINPSRGYTNYNQFKDKATLTTDKSSSTAYMQLSSLT				
gH341	GLEWVAYINPSRGYTNYNQKFKDRFTISRDN SKNTLFLQMDSL R				JA178
gH341A	GLEWIGYINPSRGYTNYNQKVKDRFTISTDKSKSTAF LQMDSL R				JA185
gH341E	GLEWIGYINPSRGYTNYNQKVKDRFTISTDKSKSTAF LQMDSL R				JA198
gH341*	GLEWIGYINPSRGYTNYNQKVKDRFTISTDKSKNTAFL QMDSL R				JA207
gH341*	GLEWIGYINPSRGYTNYNQKVKDRFTISRDN SKNTAFL QMDSL R				JA209
gH341D	GLEWIGYINPSRGYTNYNQKVKDRFTISTDKSKNTLFL QMDSL R				JA197
gH341*	GLEWIGYINPSRGYTNYNQKVKDRFTISRDN SKNTLFL QMDSL R				JA199
gH341C	GLEWVAYINPSRGYTNYNQKFKDRFTISRDN SKNTLFL QMDSL R				JA184
gH341*	GLEWIGYINPSRGYTNYNQKVKDRFTISTDKSKSTAF LQMDSL R				JA207
gH341*	GLEWIGYINPSRGYTNYNQKVKDRFTISTDKSKSTAF LQMDSL R				JA205
gH341B	GLEWIGYINPSRGYTNYNQKVKDRFTISTDKSKSTAF LQMDSL R				JA183
gH341*	GLEWIGYINPSRGYTNYNQKVKDRFTISTDKSKSTAF LQMDSL R				JA204
gH341*	GLEWIGYINPSRGYTNYNQKVKDRFTISTDKSKSTAF LQMDSL R				JA206
gH341*	GLEWIGYINPSRGYTNYNQKVKDRFTISTDKSKNTAFL QMDSL R				JA208
KDL	GLEWVAIIWDDGSDQHYADSVKGRFTISRDN SKNTLFL QMDSL R				

FIG. 5b

Application No.: 08/846,658

Title: Humanised Antibodies

Inventors: John R. Adair, Diljeet S. Athwal and John S. Emtage

Docket No. CARP-0057

Date of Filing: May 1, 1997

Atty: Doreen Yatko Trujillo

Telephone No. (215) 568-3100

	84	95	102	113		SEQ ID NO:
Dkt3vh	SEDS	AVYYCARYYDDHY	CL	DYWGQGTTLTVSS		
gH341	PEDT	GVYFCARYYDDHY	CL	DYWGQGTTLTVSS	JA178	30
gH341A	PEDT	<u>AVYYCARYYDDHY</u>	CL	DYWGQGTTLTVSS	JA185	12
gH341E	PEDT	GVYFCARYYDDHY	CL	DYWGQGTTLTVSS	JA198	13
gH341*	PEDT	GVYFCARYYDDHY	CL	DYWGQGTTLTVSS	JA207	14
gH341D	PEDT	GVYFCARYYDDHY	CL	DYWGQGTTLTVSS	JA197	15
gH341*	PEDT	GVYFCARYYDDHY	CL	DYWGQGTTLTVSS	JA209	16
gH341*	PEDT	GVYFCARYYDDHY	CL	DYWGQGTTLTVSS	JA199	17
gH341C	PEDT	GVYFCARYYDDHY	CL	DYWGQGTTLTVSS	JA184	18
gH341*	PEDT	<u>AVYYCARYYDDHY</u>	CL	DYWGQGTTLTVSS	JA203	19
gH341*	PEDT	<u>AVYYCARYYDDHY</u>	CL	DYWGQGTTLTVSS	JA205	20
gH341B	PEDT	<u>AVYYCARYYDDHY</u>	CL	DYWGQGTTLTVSS	JA183	21
gH341*	PEDT	GVYFCARYYDDHY	CL	DYWGQGTTLTVSS	JA204	22
gH341*	PEDT	GVYFCARYYDDHY	CL	DYWGQGTTLTVSS	JA206	23
gH341*	PEDT	GVYFCARYYDDHY	CL	DYWGQGTTLTVSS	JA208	24
KDL	PEDT	GVYFCARDGGHGFCSSASCFGPDYWGQGTPTVTVSS				10

FIG. 5c

DKT3 LIGHT CHAIN CDR GRAFTING

1. gL221 and derivatives

	1	24	34	42	
Dkt3vl	QIVLTQSPA	MSASPG	EKVTMT	CSASS.	SVSYM
gL221	DIQMTQSP	SSLSAS	VGDRVT	ITCSASS.	SVSYM
gL221A	<u>QIV</u> MTQSP	SSLSAS	VGDRVT	ITCSASS.	SVSYM
gL221B	<u>QIV</u> MTQSP	SSLSAS	VGDRVT	ITCSASS.	SVSYM
gL221C	<u>DIQ</u> MTQSP	SSLSAS	VGDRVT	ITCSASS.	SVSYM
REI	DIQMTQSP	SSLSAS	VGDRVT	ITCQASQ	DI IKYLN
	43	50	56		85
Dkt3vl	SPKRWIY	DTSKLAS	GVPAHF	RGSGSG	TSYSLT
gL221	APKLLIY	<u>DTSKLAS</u>	GVPSRF	SGSGSG	TDYTFT
gL221A	APKRWIY	<u>DTSKLAS</u>	GVPSRF	SGSGSG	TDYTFT
gL221B	APKRWIY	<u>DTSKLAS</u>	GVPSRF	SGSGSG	TDYTFT
gL221C	APKRWIY	<u>DTSKLAS</u>	GVPSRF	SGSGSG	TDYTFT
REI	APKLLIY	EASNLQ	AGVPSR	FSGSGSG	TDYTFT
					ISSLPEDIAT (SEQ ID NO:8)
	86	91	96		108
Dkt3vl	YYCQQW	SSNP	FTFGSG	TKLEINR	(SEQ ID NO:29)
gL221	YYCQQW	SSNP	PETFGG	GTKLQITR	(SEQ ID NO:25)
gL221A	YYCQQW	SSNP	PETFGG	GTKLQITR	(SEQ ID NO:26)
gL221B	YYCQQW	SSNP	PETFGG	GTKLQITR	(SEQ ID NO:27)
gL221C	YYCQQW	SSNP	PETFGG	GTKLQITR	(SEQ ID NO:28)
REI	YYCQQY	QSLPY	TFGG	GTKLQITR	(SEQ ID NO:9)

CDR'S ARE UNDERLINED

FRAMEWORK RESIDUES INCLUDED IN THE GENE ARE DOUBLE UNDERLINED

FIG. 6

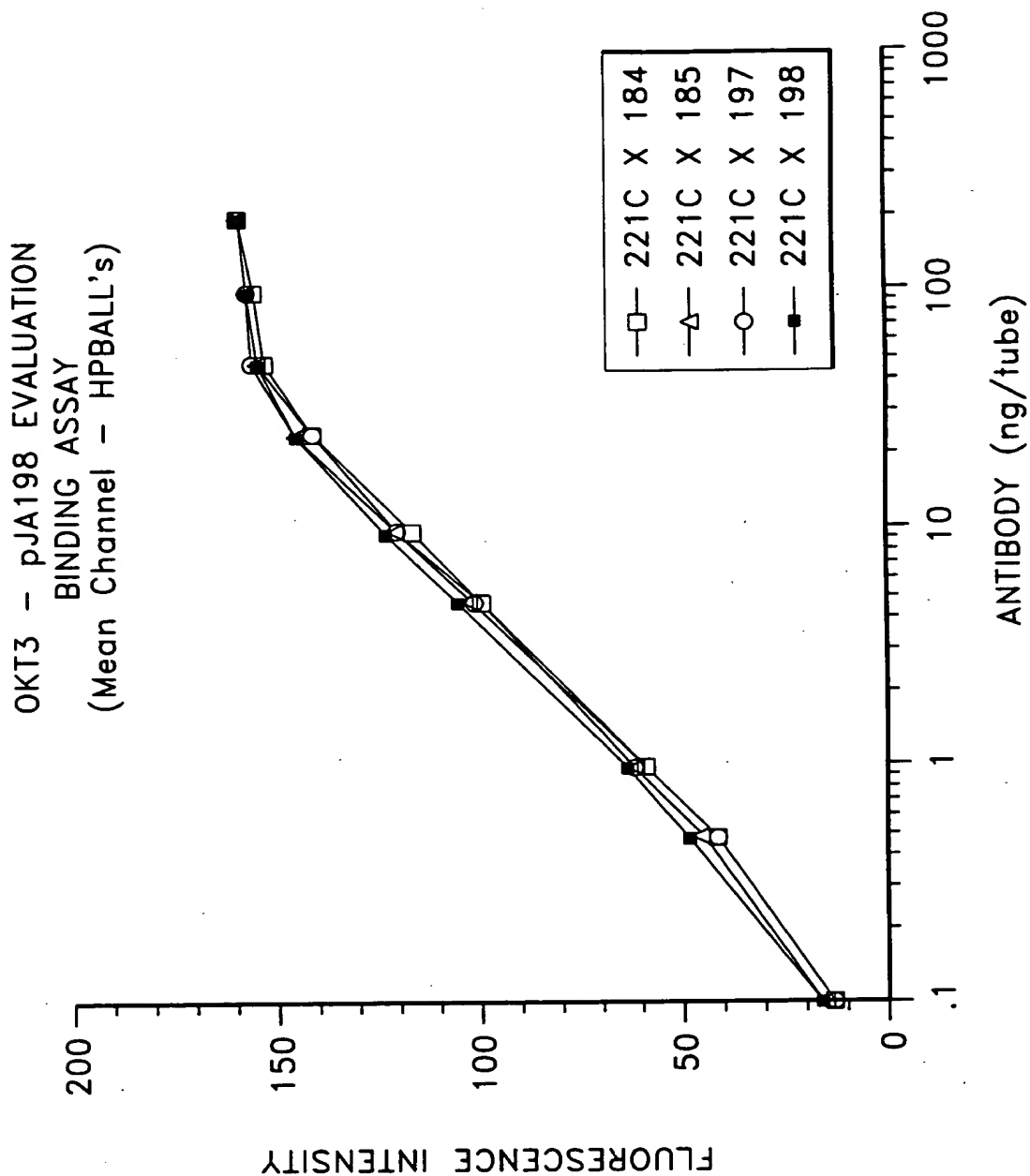


FIG. 7

OKT3 - pJA198 EVALUATION
 BLOCKING ASSAY
 (Mean Channel - HPBALL's)

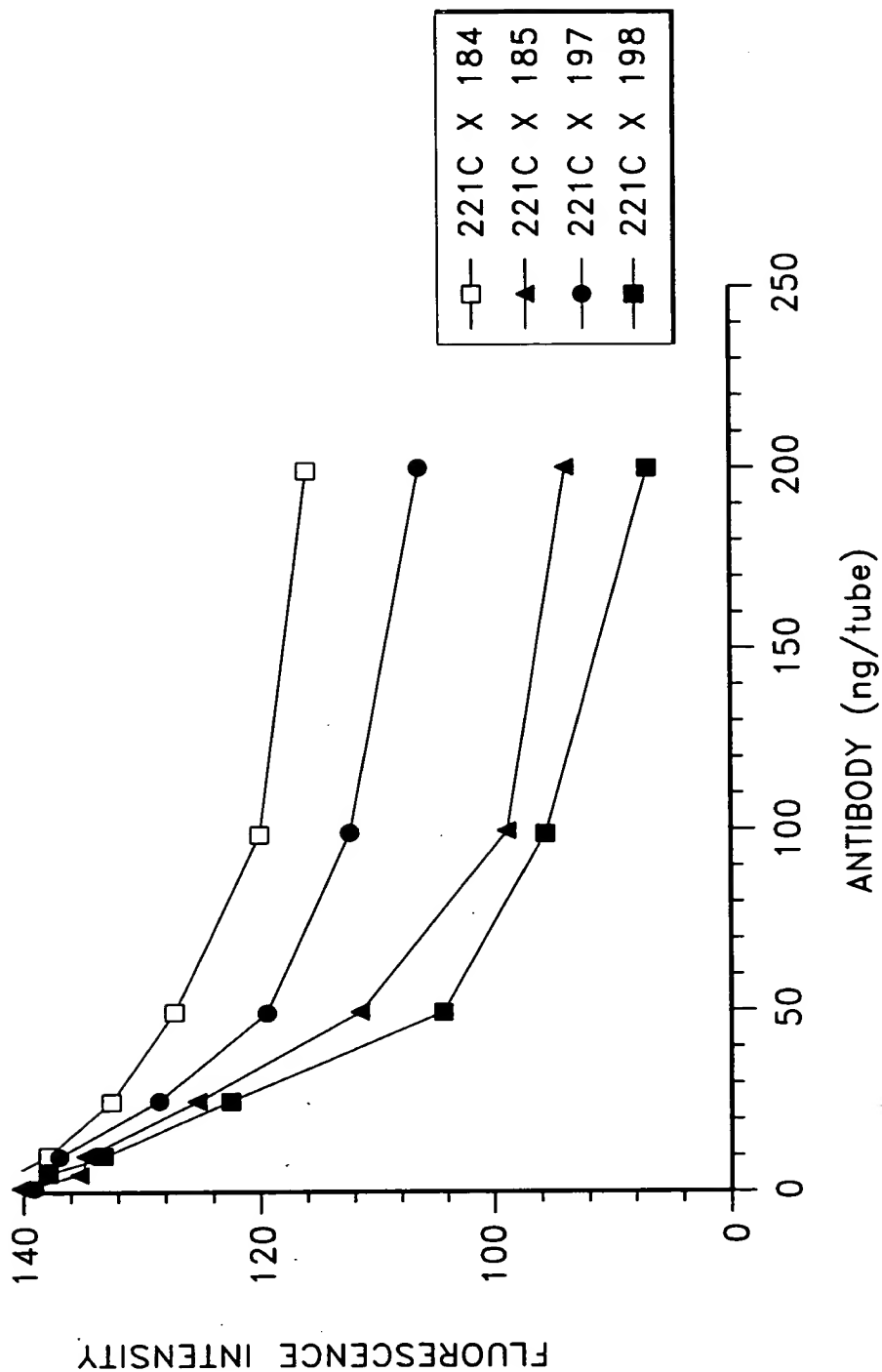


FIG. 8

Application No.: 08/846,658
 Title: Humanised Antibodies
 Inventors: John R. Adair, Diljeet S. Athwal and John S. Emtage
 Docket No. CARP-0057
 Atty: Doreen Yatko Trujillo

Date of Filing: May 1, 1997
 Telephone No. (215) 568-3100

BLOCKING ASSAY
 (Mean Channel - HPBALL's)

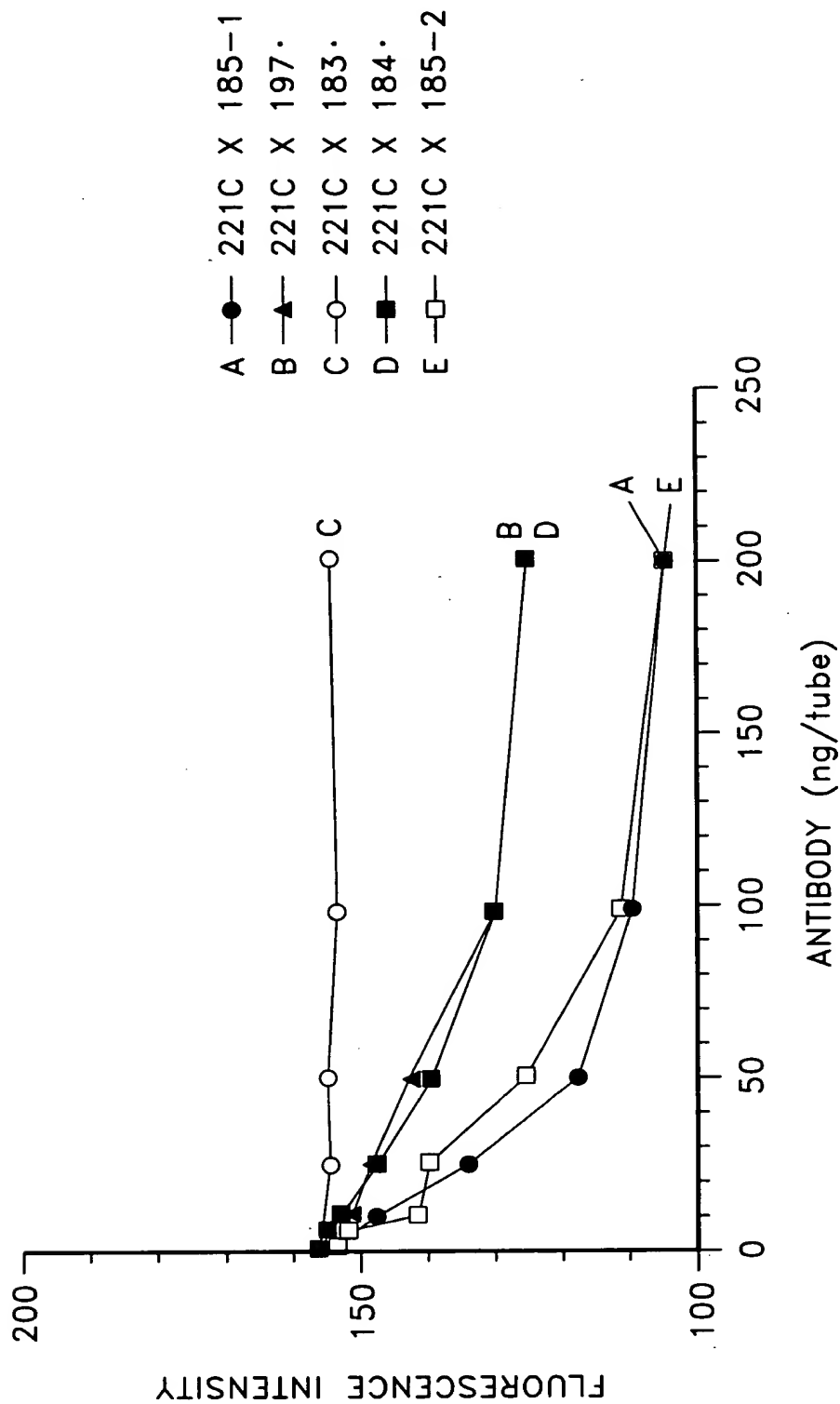
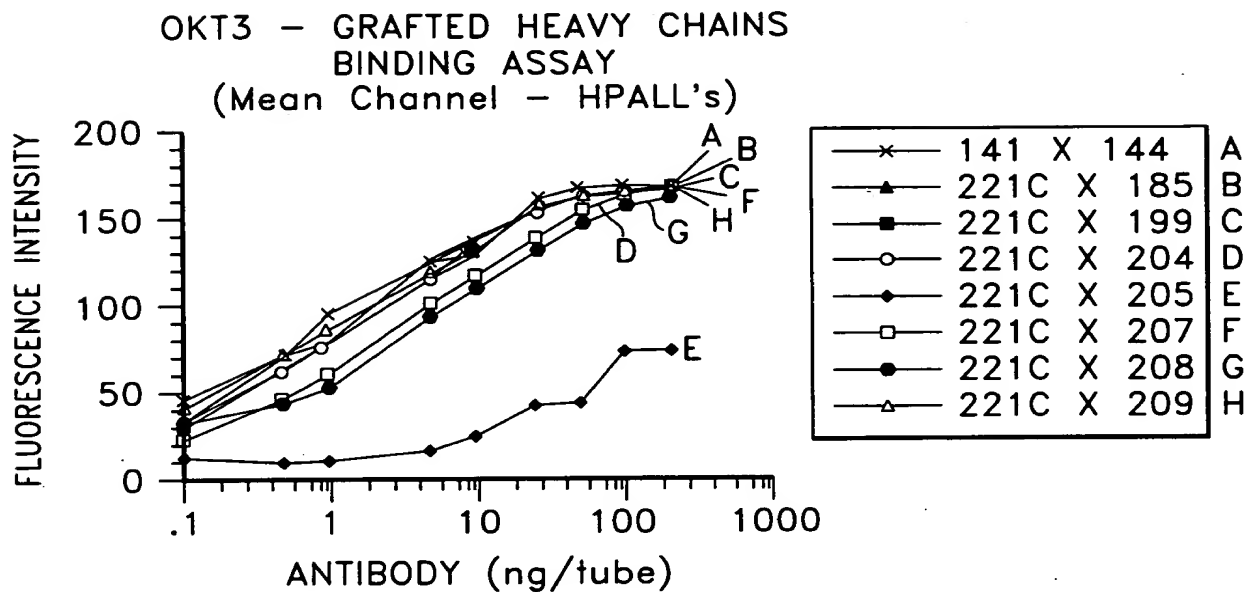


FIG. 9



—◆—	(205)	—, —, —, 24, 48, 49, 71, 73, 76, 78, 88, 91,
—●—	(208)	6, —, —, 24, 48, 49, 71, 73, —, 78, —, —,
—○—	(204)	6, —, —, 24, 48, 49, 71, 73, 76, 78, —, —,
—■—	(199)	6, 23, 24, 48, 49, —, —, —, —, —, —,
—□—	(207)	6, 23, 24, 48, 49, 71, 73, —, 78, —, —,
—▲—	(185)	6, 23, 24, 48, 49, 71, 73, 76, 78, 88, 91,
—△—	(209)	6, 23, 24, 48, 49, —, —, —, —, 78, —, —,
—x—	141 X 144	

FIG. 10a

Application No.: 08/846,658

Title: Humanised Antibodies

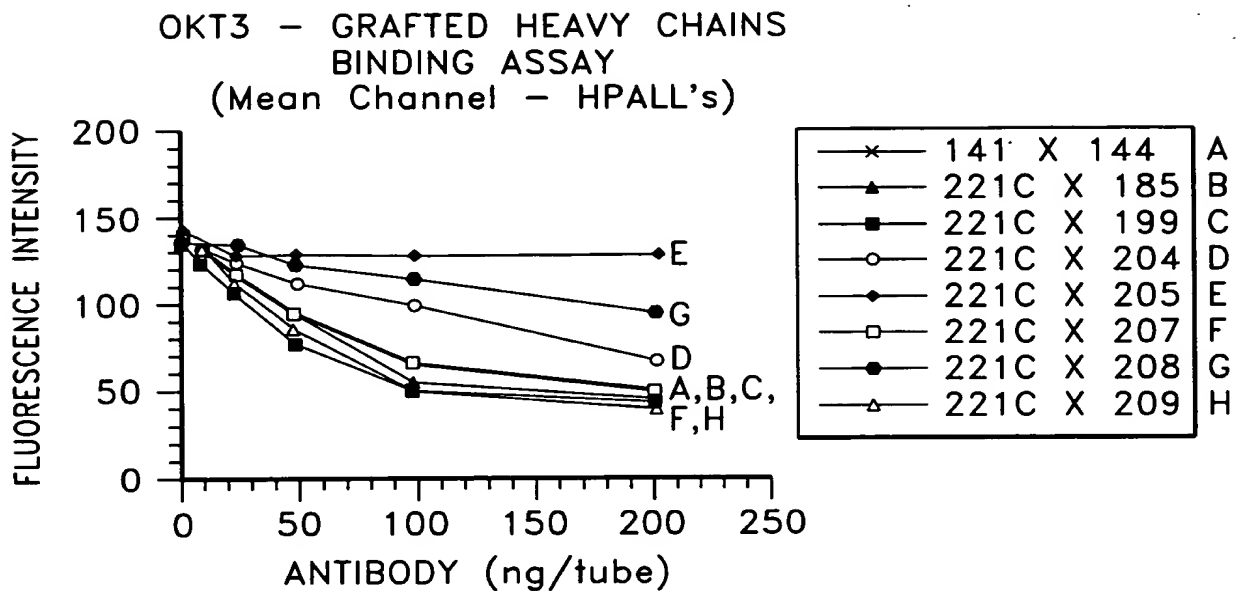
Inventors: John R. Adair, Diljeet S. Athwal and John S. Emtage

Docket No. CARP-0057

Date of Filing: May 1, 1997

Atty: Doreen Yatko Trujillo

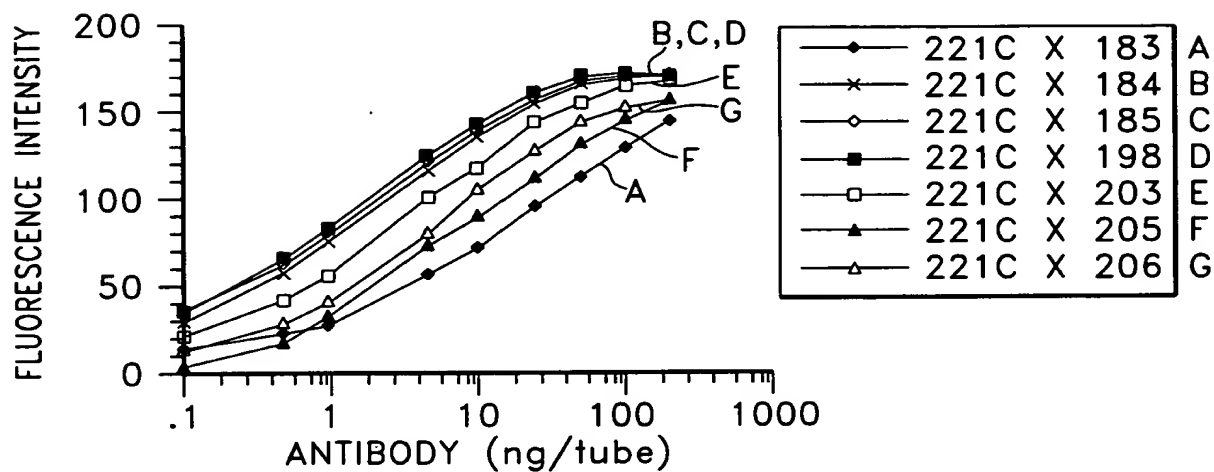
Telephone No. (215) 568-3100



—◆—	(205)	—, —, 24, 48, 49, 71, 73, 76, 78, 88, 91,
—●—	(208)	6, —, 24, 48, 49, 71, 73, —, 78, —, —,
—○—	(204)	6, —, 24, 48, 49, 71, 73, 76, 78, —, —,
—■—	(199)	6, 23, 24, 48, 49, —, —, —, —, —, —,
—□—	(207)	6, 23, 24, 48, 49, 71, 73, —, 78, —, —,
—▲—	(185)	6, 23, 24, 48, 49, 71, 73, 76, 78, 88, 91,
—△—	(209)	6, 23, 24, 48, 49, —, —, —, —, 78, —, —,
—x—	141 X 144	

FIG. 10b

OKT3 - GRAFTED HEAVY CHAINS
BINDING ASSAY
(Mean Channel - HPALL's)



	(183)	--, --, --, --, --, 48, 49, 71, 73, 76, 78, 88, 91,
	(205)	--, --, --, 24, 48, 49, 71, 73, 76, 78, 88, 91,
	(184)	6, 23, 24, --, --, --, --, --, --, --, --, --, --,
	(206)	--, --, --, 24, 48, 49, 71, 73, 76, 78, --, --, --,
	(203)	6, --, --, 24, 48, 49, 71, 73, 76, 78, 88, 91,
	(185)	6, 23, 24, 48, 49, 71, 73, 76, 78, 88, 91,
	(198)	6, 23, 24, 48, 49, 71, 73, 76, 78, --, --, --,

FIG. 11a

	(183)	--, --, ---, , 48, 49, 71, 73, 76, 78, 88, 91,
	(205)	--, --, 24, 48, 49, 71, 73, 76, 78, 88, 91,
	(184)	6, 23, 24, --, --, --, --, --, --, --, --, --,
	(206)	--, --, 24, 48, 49, 71, 73, 76, 78, --, --,
	(203)	6, --, 24, 48, 49, 71, 73, 76, 78, 88, 91,
	(185)	6, 23, 24, 48, 49, 71, 73, 76, 78, 88, 91,
	(198)	6, 23, 24, 48, 49, 71, 73, 76, 78, --, --,

FIG. 11b

Application No.: 08/846,658

Title: Humanised Antibodies

Inventors: John R. Adair, Diljeet S. Athwal and John S. Emtage

Docket No. CARP-0057

Atty: Doreen Yatko Trujillo

Date of Filing: May 1, 1997

Telephone No. (215) 568-3100

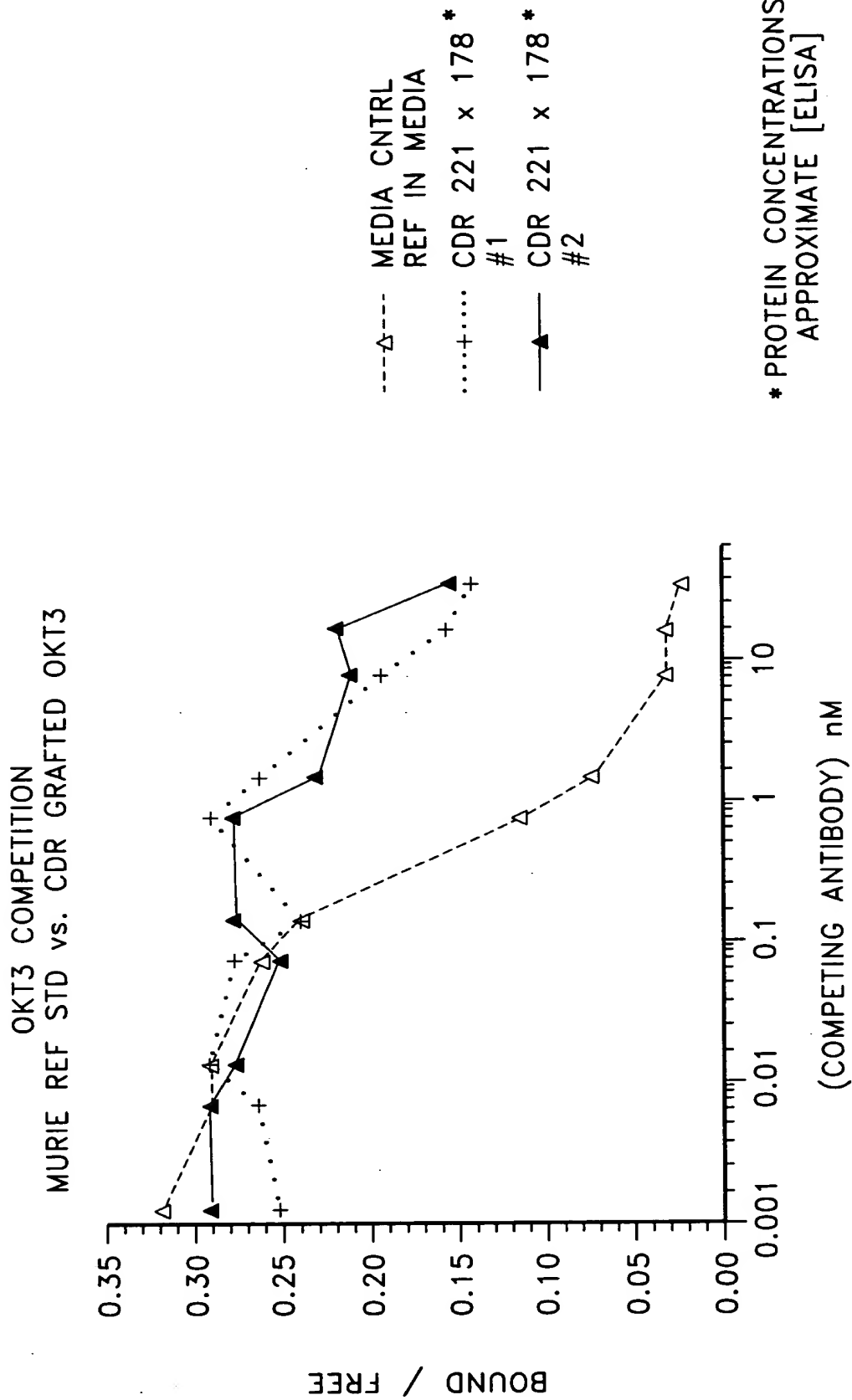


FIG. 12

Application No.: 08/846,658

Title: Humanised Antibodies

Inventors: John R. Adair, Diljeet S. Athwal and John S. Emtage

Docket No. CARP-0057

Atty: Doreen Yanko Trujillo

Date of Filing: May 1, 1997

Telephone No. (215) 568-3100

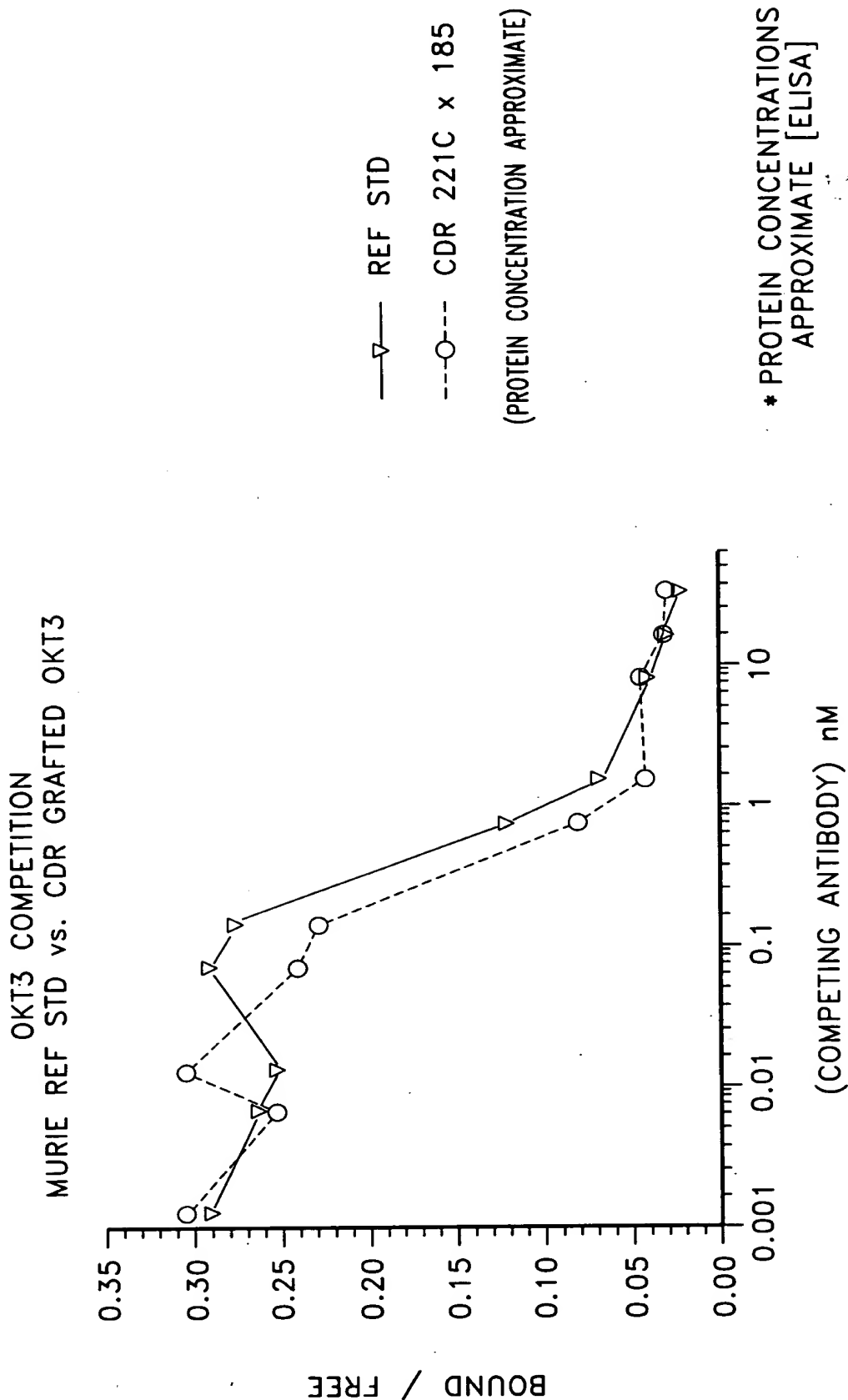


FIG. 13